Accredited Standards Committee X12 Convergence Initiatives

Next Generation Logistics Transactions-Extensible Markup Language (XML) Kick-Off Meeting

September 9, 2003

ASC X12's Mission

Develop, and maintain
electronic data exchange standards
in X12 EDI, XML and UN/EDIFACT formats
and collaborate with industry organizations
to build

best of breed standards to enhance
business processes, reduce costs and

ASC X12's Vision

Be the preferred US standards body for cross-industry development & maintenance of electronic data exchange standards; define electronic business document content and

The ASC X12 Collaborative Environment

- Offers a neutral environment for cross-industry standards harmonization & convergence
- Collaborates with industry organizations to build best of breed EDI standards in X12 & XML formats
- Works with international e-business standards development efforts

ASC X12 Subcommittees

- ***representing a wide range of industry interests***
- X12A Education Administration
- X12C Communications & Controls
- X12F Finance
- X12G Government
- X12H Materials Management
- X12I Transportation
- X12M Procurement & Distribution
- X12N Insurance

Forces That Shaped the ASC X12 Approach

- Early investigation of XML-based business messages
- Multiple XML summits
- Involvement in the ebXML Initiative
- Joint Core Component Initiative
- Demand from ASC X12 membership

Accomplishments that Foster Convergence

- X12's XML infrastructure including XML review procedures, Reference Model for XML Design using Context Inspired Component Architecture (CICA) & draft XML Design Rules

- Standard maintenance cycle reduced from 9 to 3-4 months by implementing a new submission process, using automated tools

- A rock-solid Intellectual Property Policy was adopted

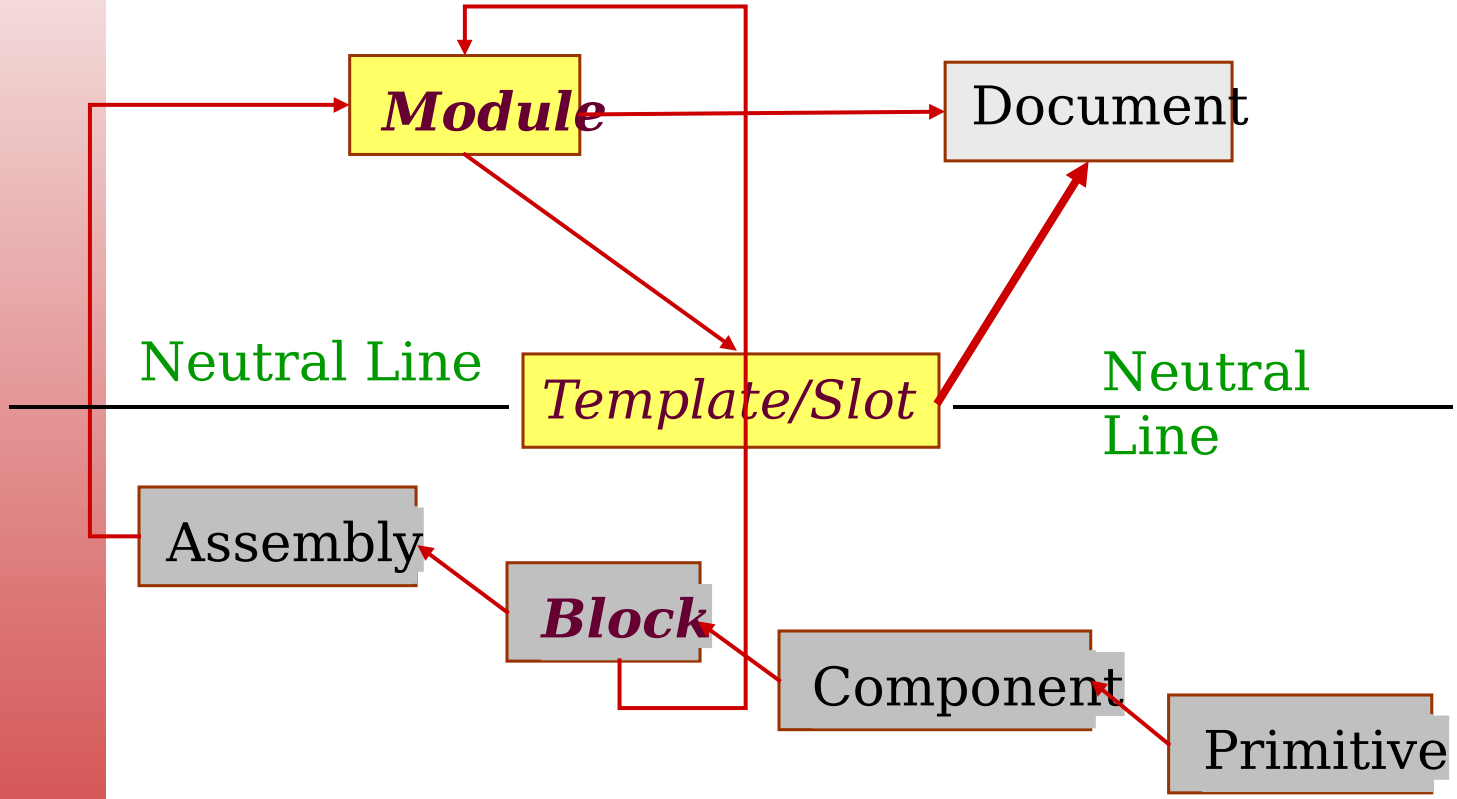
About CICA
Methodology for building and interpreting e-business documents

- Guiding Principles
  - Align with UN/CEFACT, ebXML, W3C
  - Build on existing foundations & best practices
- Modularity, reusability, easy extension & customization
  - Defined structure with flexibility required by different business models
- Recommendations for XML syntax in design of schemas and instance documents

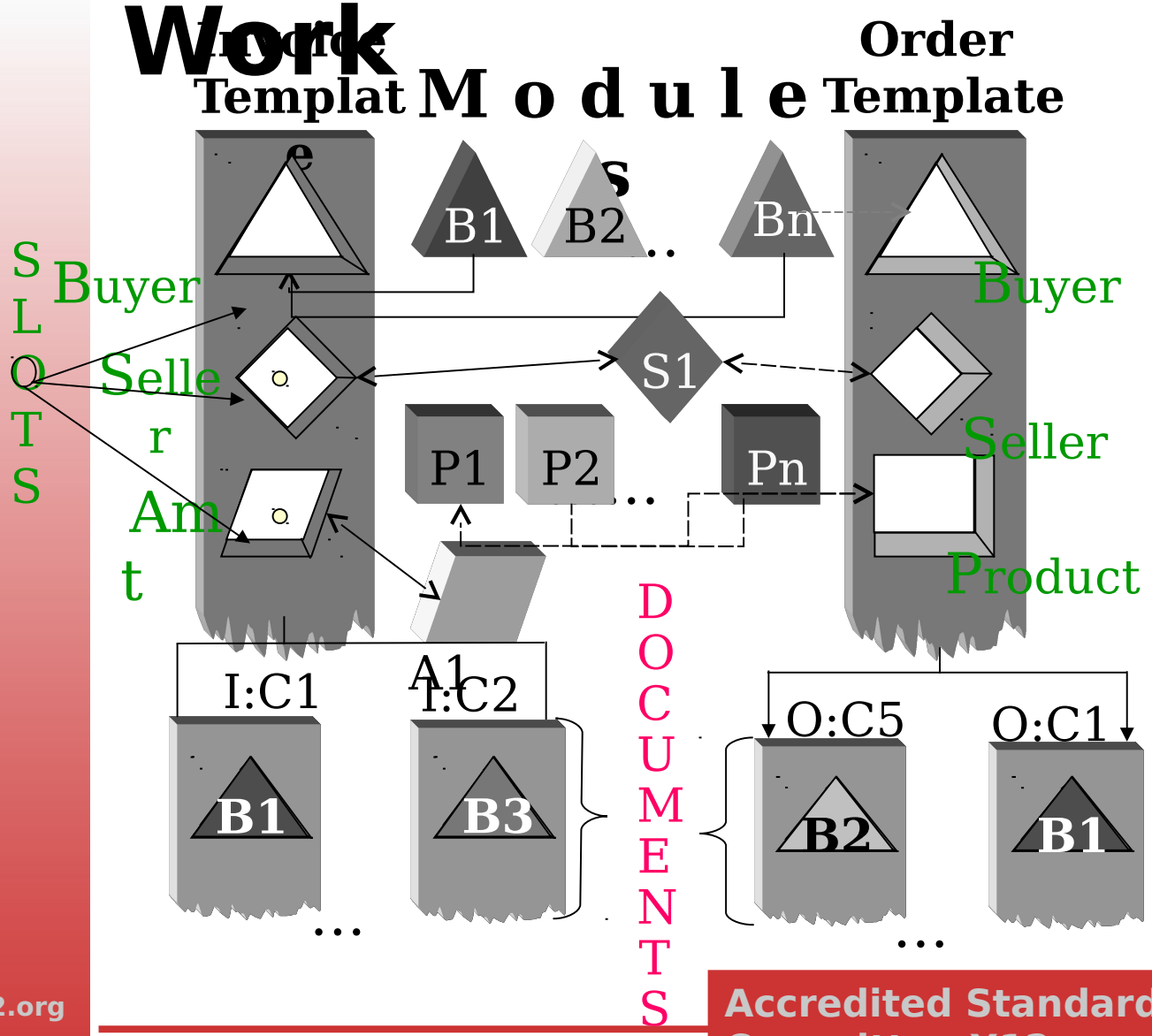
CICA Basics

- Seven discrete levels of granularity
  - 4 layers are designed to be semantically neutral (Components)
  - 3 layers are designed to be more specific to industry implementations (Context)
- Draws on ebXML core components
- Encourages reuse of data and promotes semantic interoperability

CICA Architecture Layers



CICA Architecture At Work



Gartner Report Praises CICA

Gartner predicts that by 2008, a majority of business transactions will be based on ASC X12's proposed XML architecture.

"Enterprises should understand CICA and expect vendors to support it no later than 2006."

"Users should push their standards organizations to use the CICA framework when developing XML-based specifications."

Key ASC X12 Initiatives for 2003

- Determine existing XML work & best practices to incorporate into X12 initiatives and work closely with UN/CEFACT
- Fine tune our XML business message infrastructure & procedures including an XML syntax document
- Make X12 EDI procedures analogous with new X12 XML procedures

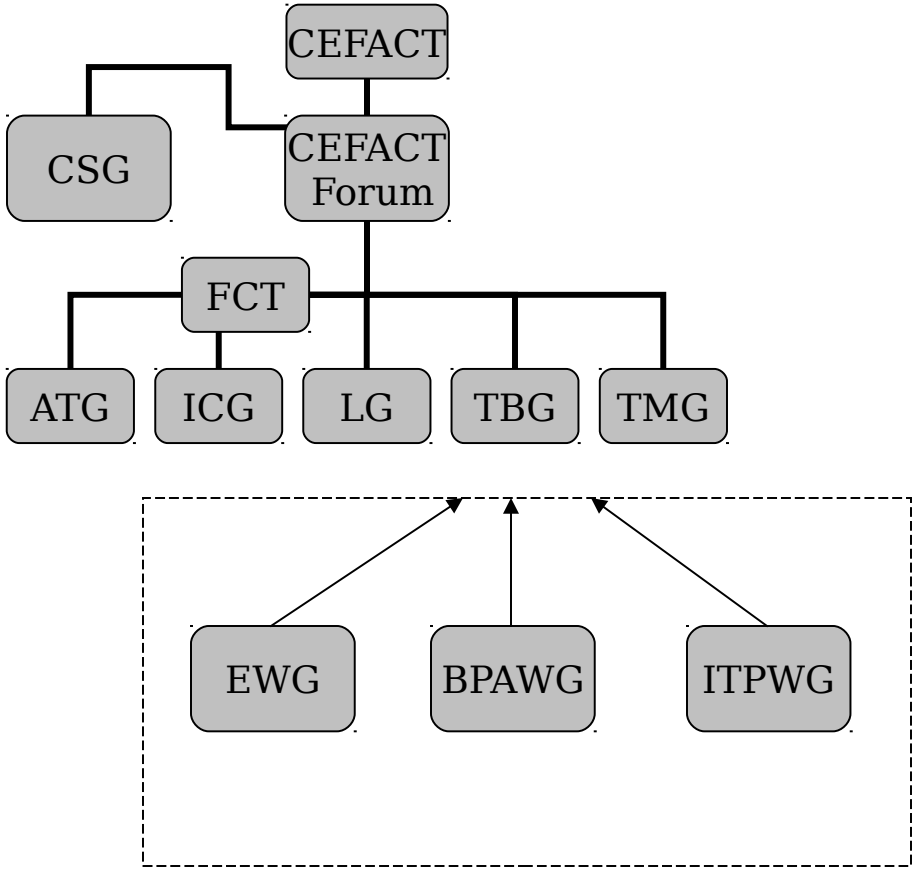
ASC X12 Strategy for 2003

- ASC X12 XML standards will be developed using CICA & X12's XML design rules with intent to convert
- Achieve a consistent XML approach for users, X12 will collaborate with UN/CEFACT to develop:
  - Single message design architecture
  - XML schema syntax
  - XML design rules & guidelines
- Use UN/CEFACT core components when applicable, contribute additional components as created
- Harmonize ASC X12's XML business messages with UN/CEFACT's approach

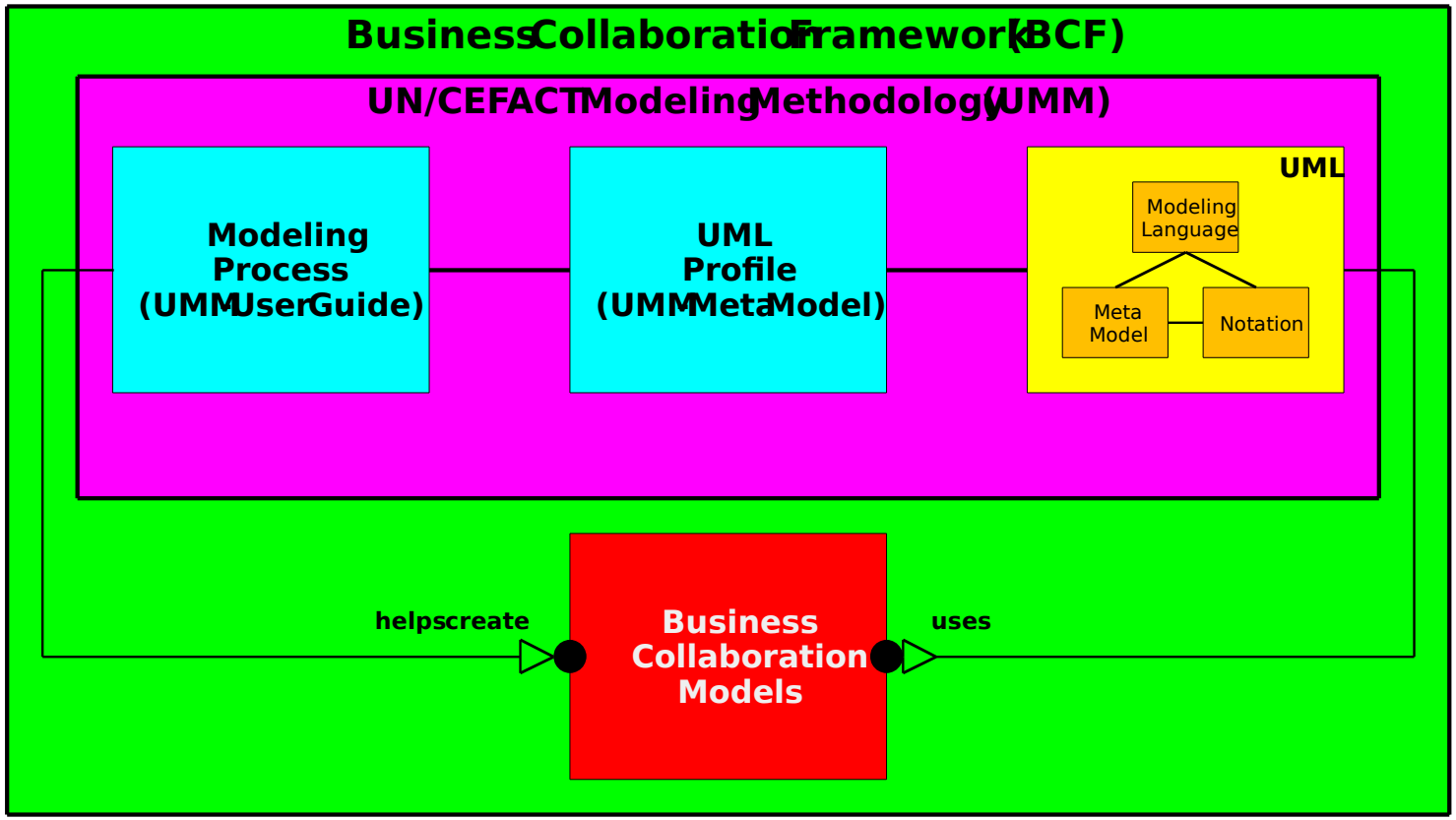
International Activity

- United Nations activities were re-aligned in response to complex business environment
- CEFACT Forum launched Fall, 2002

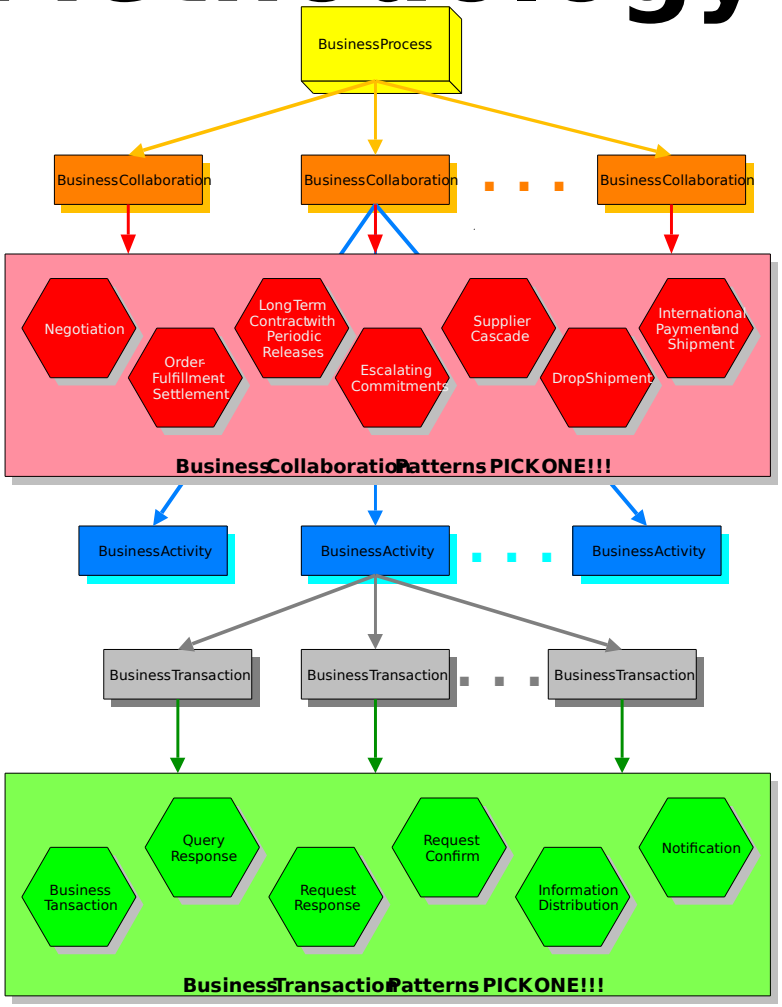
CEFACT Forum



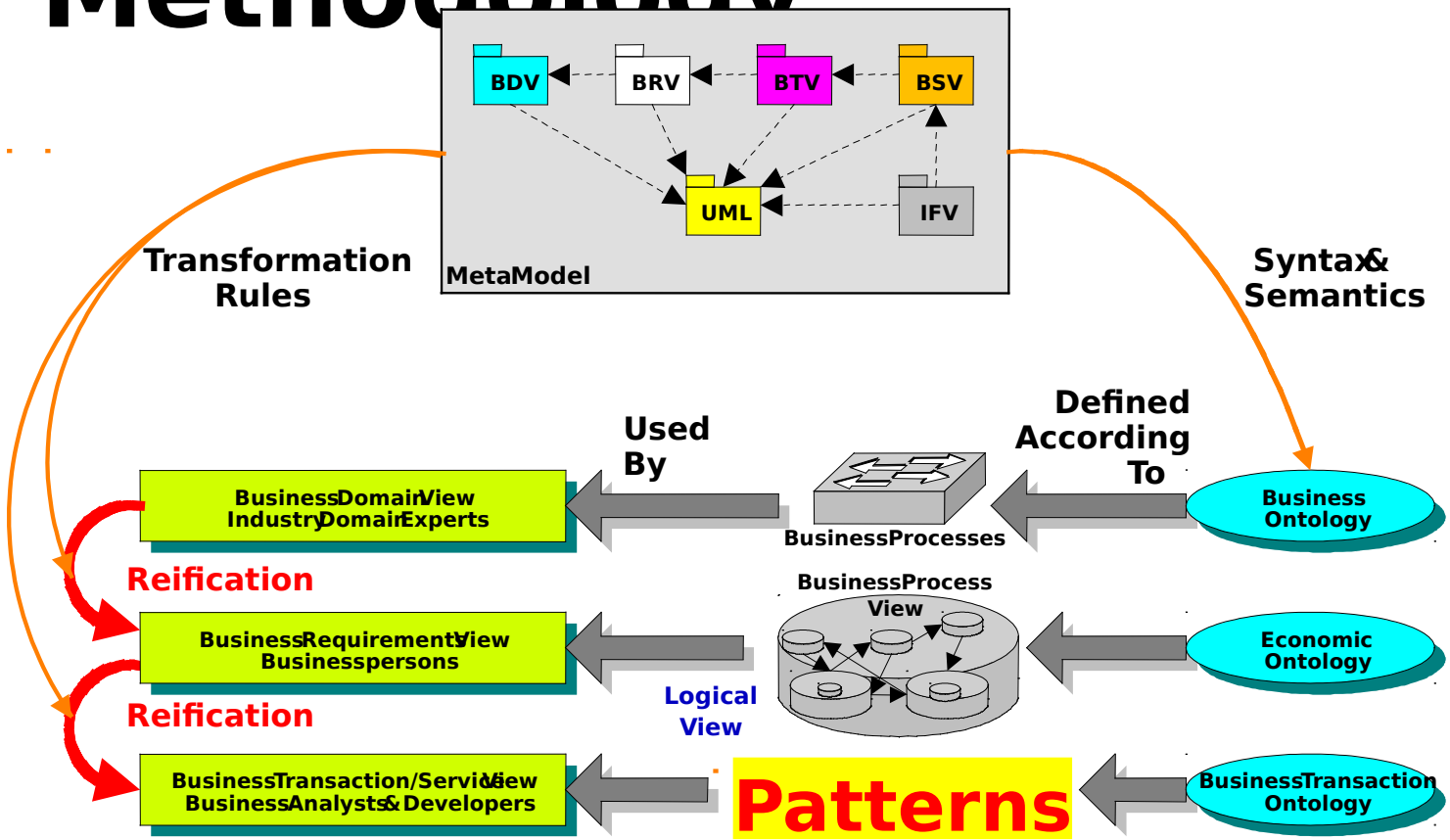
Business Collaboration Framework



UN Modeling Methodology



UN Modeling Methodology



State of UN/CEFACT

- Building core components based on ebXML Core Component Technical Specification (CCTS)
- Modeling existing and new business processes
- Working to incorporate OASIS/UBL work into CEFACT work plan
- Missing specification to assemble core components into business documents

Therefore …

- Multiple architectures are being proposed
- The architectures are not interchangeable
- ASC X12 is:
  - committed to CICA
  - Strongly promoting convergence of the two approaches
- Current activities
  - Transportation
  - Finance
  - Education
  - Government

Many voices, one common message: effective electronic business exchange

Ralph Berwanger

Vice Chair, ASC X12

rberwanger@btrade.com

972.580.3970

www.x12.org